

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P O Box 1450 Alexandra, Virginia 22313-1450 www.weylo.gov

ELECTRONIC

01/26/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/720,136	11/25/2003	Ikunao Isomura	245733US2SRD	4417	
23859 017590 017662099 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET			EXAM	EXAMINER	
			LIEW, ALEX KOK SOON		
ALEXANDRI	ALEXANDRIA, VA 22314		ART UNIT	PAPER NUMBER	
			2624		
			NOTIFICATION DATE	DELIVERY MODE	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com oblonpat@oblon.com jgardner@oblon.com

Supplmental Notice of Allowability

Application No.	Applicant(s)	
10/720,136	ISOMURA ET AL.	
Examiner	Art Unit	
ALEX LIEW	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address-All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included
herewith (or previously mailed, a Notice of Allowance (PTOL-65) or other appropriate communication will be mailed in due course. THIS
NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative
of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to 12/23/08.
- 2. The allowed claim(s) is/are 1-22.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some* c) None of the:
 - 1. A Certified copies of the priority documents have been received.
 - 2. Certified copies of the priority documents have been received in Application No. _____
 - Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) hereto or 2) to Paper No./Mail Date _____.
 - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

 DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. Notice of References Cited (PTO-892)
- Notice of Draftperson's Patent Drawing Review (PTO-946).
- Information Disclosure Statements (PTO/SB/08), Pacer No./Mail Date
- Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summery (PTO-413).
 Paper No./Mail Date
- Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- 9. 🔲 Other ____

Art Unit: 2624

1. The amendment after allowance filed on 12/23/08 is entered and made of record.

Reason for Allowance

Claims 1-22 are allowable.

With regards to claim 1, the examiner cannot find suggestion or motivation disclosing a comparator which sequentially compared the first detected pattern data corresponding to the plurality of repeated pattern areas detected by the repeated pattern area detector through the second imaging optics in accordance with die-to-die comparison, wherein after the second imaging optic forms the second optical image of the pattern, the low-resolution image data generator generates the second detected pattern data corresponding to the entire pattern region using the second optical image, the repeated pattern generator detects if the candidates exist, the first imaging optics forms the first optical image of the candidates, the detected pattern data generator generates the first detected pattern data of the candidates, and the comparator compares the first detected pattern data with die-to-die comparison in combination with the rest of the limitations of claim 1.

With regards to claim 11, the examiner cannot find any applicable prior art and suggestion disclosing the repeated pattern area generator generates the image data of the entire image region of the pattern from the design pattern data with the pixel size corresponding to the first optical magnification to detect if the candidates for the

Application/Control Number: 10/720,136

Art Unit: 2624

repeated pattern areas exist, the first imaging optics forms the first optical image of the candidates for the repeated pattern areas, the detected pattern generator detects the first optical image to generate the detected pattern data, and the comparator compares the detected pattern areas on the detected pattern data with the die-to-die comparison in combination with the rest of the limitations of claim 11.

With regards to claim 19, the examiner cannot find any applicable prior art and suggestion disclosing while the imaging optics forms the optical image and the detected pattern generator detects the optical image to generate the detected pattern data, the repeated pattern area detector analyzes the layout information of the design pattern data as to whether the patterns from the same file exist, detects and registers the repeated pattern areas from the design pattern data, and the comparator compares the detected pattern data corresponding to the detected pattern areas registered with the die-to-die comparison in combination with the rest of the limitations of claim 19.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 10/720,136

Art Unit: 2624

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX LIEW whose telephone number is (571)272-8623 or cell (917)763-1192. The examiner can be reached anytime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Bella can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew C Bella/ Supervisory Patent Examiner, Art Unit 2624

Alex Liew AU2624 12/31/08